

Inter-American Co-operation in the Development of Standards

R. E. ZIMMERMAN

DEALINGS among and between peoples are facilitated when there is a common understanding among the parties involved, and, if the dealings relate to things or articles of commerce, then so much the better if the standards pertaining to their manufacture, performance, and acceptance are mutually understood and agreed upon.

International standardization is a matter which can be realized only in part, even where descriptive standards are applicable. National differences in aspirations, language, natural resources, physical equipment, and long-established customs and methods operate to mark off certain areas as favorable, others as unfavorable, for the spread of international standards. The International Electrotechnical Commission has accomplished much in bringing about practically world-wide uniformity in units, measures, and nomenclature. Such agreement upon the use of a common set of scientific designations has facilitated greatly the interchange of technical information. Less marked have been the results secured thus far by the International Standards Association, in which this country, through the American Standards Association, is represented along with 21 others. Although its world-wide activities necessarily have been interrupted for the period of the war, the international association has made substantial progress on a selected group of projects. In general, to whatever extent the international acceptance of practically identical or equivalent standards has been found feasible, in like measure have benefits been conferred upon science and industry and upon the peoples they serve.

Inter-American co-operation in the adoption of standards, from our standpoint, presents some conditions which are different from those involved in collaborating with the highly industrialized nations of Europe. Organized standardization in the other American republics is of relatively recent origin, as compared with the set patterns prevailing elsewhere. Moreover, in

Interest in international standardization is increasing rapidly in Latin America—to a considerable extent through the efforts of the American Standards Association which has sought ways and means of supplying more adequate American representation and co-operation in the development of standards. The program for the future includes exchange of technical data among the various American republics and development of inter-American standards to the advantage of all the Americas.

quite a number of the Central and South American nations, standards and specifications are of preponderating interest as applied to imports, rather than to domestic production. In certain countries, however, the consideration of domestic production is coming more and more into prominence, and the pace is rapidly accelerating. So likewise is the

awareness of the value of standards, as applied to all classes of products.

Hemispheric security and solidarity have a special significance for all of the American nations during a period of global war. Mutual help in overcoming a common enemy calls for pooling resources and working together with the highest possible degree of understanding. Minds must meet and things must fit. Strategic materials are needed now and will be needed later, regardless of name. In numerous material ways interchangeability enters the picture, and standardization is indicated.

Good-neighbor policy stretches over periods of both war and peace and provides for the exchange of benefits in all fields of endeavor. It is our hope that what we have learned in the development and use of standards here in the United States may qualify as one of the items of benefit in the series of exchanges which will mark our living and working together with these neighbor republics.

Exports to the Americas and imports from them are bound to have an important relationship to standards and standardization, if commercial intercourse between and among the republics is to be facilitated. In the United States, producers of goods for export are deeply interested in markets throughout this hemisphere, as well as elsewhere. They have something to offer, many things needed in Central and South America, and expect acceptance only on the basis of price, quality, and service. On the other hand, it would be strange if the other American republics did not wish to offer their products in the markets of the United States.

In furtherance of both of these aims, it is to the interest of the parties concerned that the standards adopted for application to the articles of commerce be appropriate in every respect. One of the matters over

Essential substance of an address at the AIEE national technical meeting, Cleveland, Ohio, June 21-25, 1943.

R. E. Zimmerman is vice-president in charge of research and technology of the United States Steel Corporation, New York, N. Y., and is currently president of the American Standards Association.

which we in the United States are solicitous is that the standards which are being formulated by the countries actively interested in the movement toward standardization be not drawn in such a way as to exclude our goods or to place them at an arbitrary disadvantage with the products of other exporters. Many of us in the United States do not realize the extent to which foreign competitive influences have been at work in the American republics for the purpose of bending proposed standards in that very direction. Because of our failure to apply adequate measures of co-operation during the periods when specifications and standards were being formed and technologists of other nations were hard at work on the scene, there is already a considerable handicap to be overcome. The present world situation affords us an opportunity, if we will embrace it properly, to make up in co-operation what we have omitted over a period of years.

It must be said, in justice, that the condition described as pertaining to the American republics, although characterized by inadequate measures, has not been one of utter neglect. From time to time various governmental agencies, such as the Bureau of Foreign and Domestic Commerce and the National Bureau of Standards have lent a helping hand with respect to specifications. Some years ago a number of the standards of the American Society for Testing Materials were published in Spanish and Portuguese and distributed. More recently that society's standards on refractories were translated into Spanish; the Argentine government oil fields published the ASTM petroleum standards, and the Argentine Cement Institute translated and distributed the standard specifications for concrete.

As early as 1924, on the initiative of several of the South American countries, a Pan-American conference on standardization was held at Lima, Peru, in connection with a scientific conference under the auspices of the Pan-American Union. Again, two years later, a second such conference was held in Washington. Considerable work was done, but practical results were meager.

During 1941 the division of engineering and industrial research of the National Research Council conducted a tour of industrialists through Latin America in the interest of increased co-operation. The Inter-American Safety Council, founded in 1938, co-operates with the accident-prevention associations in some 20 American republics by supplying information on safety codes and methods. Its membership comprises more than 1,000 industrial units employing in the aggregate about 1,000,000 workmen. In this field of co-operation desirable progress is being made.

Collateral contacts of value are maintained throughout the Americas by our five engineering societies through resident members in various countries, by the exchange of bulletins, and by various services performed. Memberships that now exist in the other Americas are of the utmost importance in any of the work of collaboration that we can hope to carry on. These societies, for ex-

ample, have a Joint Committee on Inter-American Relations which is planning to print, in Spanish and Portuguese, a digest embracing a large number of papers which should be of interest to engineers. Again, the AIEE and the American Standards Association have had a joint committee concerned with certain special phases of inter-American standardization. The work of that committee is done, and it is not functioning now, but the work that was stimulated by the collaboration is being carried on.

Due mention must be made of the valient services performed, over a period of years, by the American Chamber of Commerce in Buenos Aires. In the absence of any other agency, members of this body have kept in close contact with the standardizing institute of the Argentine, assisting in every way possible with the formulation of standards and carrying the American point of view into the proceedings. This chamber in Buenos Aires has likewise played a most important role in effecting plans for organized full-time American representation in the standardization movement in South America.

As mentioned heretofore, interest in standards is increasing rapidly in many of the American republics. Among the more prominent standardizing bodies already set up and functioning are the following:

Mexico: On January 1, 1943, the *Direccion General de Normas Nacionales*, or Department of National Standards, was organized to replace the former Department of Weights and Measures. The present organization has quite a wide program for standardization. It is governmentally sponsored but is in quite close touch with the work that is going on in the United States, and, as an aid to the operations in Mexico City, an advisory committee, with representatives from five American interests located in Mexico, is proceeding to help the Department of National Standards.

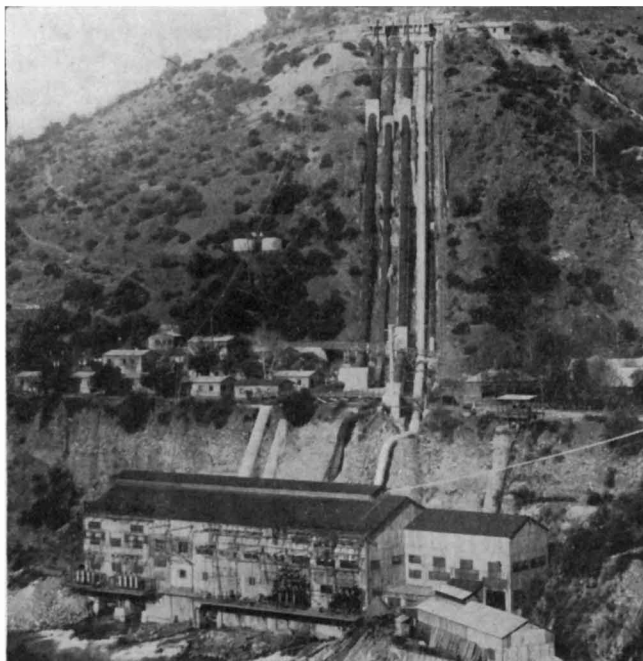


Photo courtesy General Electric Company

Coya hydroelectric plant, Chile

Argentina: This was the first Latin American country to establish a national standardization body. It is called Instituto Argentino de Racionalizacion de Materiales, and it functions much like the American Standards Association.

Brazil: Here the Associacao Brasileira de Normas Tecnicas, similar in constitution to the ASA, takes care of the work of standardization. Another institution, the Instituto de Pesquisas Tecnologicas de Sao Paulo, performs some of the laboratory functions of a national bureau of standards. It is our understanding that these two bodies work in close collaboration, but the recently organized and functioning Association of Standards is taking care particularly of the standardization work in Brazil.

Chile: At present there is a government department which issues mandatory standards for electrical equipment. In November 1942 the first Chilean Engineering Congress recommended the establishment of a designated standardization institute. The movement is well supported, and the expectation is that an institute will soon be organized and functioning in Chile.

Uruguay: The Instituto Uruguayo de Normas Tecnicas is a recently organized body but is busily engaged with a large number of standards.

In other countries not listed here, standardization is being handled by different agencies whose operations are being followed with interest.

The American Standards Association, for more than five years past, sought ways and means of supplying more nearly adequate American representation and co-operative effort in matters pertaining to standards in South America.

When I use the word, "American," I mean all of the Americas. Naturally, we are interested in carrying the ideas of the standardizing bodies of the United States as far as we can, but we realize that there must be a meeting of minds, and that this is a co-operative effort, so that the American point of view means the point of view of all the Americas.

Through correspondence and contacts of long standing this need for American representation and co-operation was clearly recognized, and the urgency of the situation was emphasized repeatedly by members of the American Chamber of Commerce at Buenos Aires. Similar views had been expressed by committees of the American engineering and technical societies, by trade associations, and by members of industry. During the summer of 1942 a succession of events brought the awaited opportunity to crystallize plans and to take definite measures toward enlarged inter-American collaboration.

In its approach to the project the American Standards Association had the advantage of counsel from an advisory committee, composed of individuals from such organizations and agencies as the Bureau of Foreign and Domestic Commerce, National Bureau of Standards, American Society for Testing Materials, Chamber of Commerce of the United States, Export Managers Club, National Foreign Trade Council, and several industrial concerns with long experience in matters of standardization as applied to export goods. Most for-

tunately, the association also had the advice, assistance, and endorsement of the Office of Coordinator of Inter-American Affairs in its endeavors, which was most helpful in perfecting the requisite arrangements.

After the completion of the necessary formalities, the American Standards Association established an inter-American division in its New York office in December 1942, headed by a man of long experience in Spanish and Portuguese markets. As field representative in South America the association was fortunate in securing the services of an engineer and sales executive who has spent many years there and is thoroughly acquainted with the language, customs, and needs of various countries. His headquarters will be in Buenos Aires, where he has lived for several decades. Representation in Brazil has been provided by enlisting the part-time services of a sales executive who is also head of the technical committee of the American Chamber of Commerce in Rio de Janeiro. It is hoped that this work will be enlarged very shortly and that full-time representation will soon be available in several of the important centers of Brazil.

According to the new program, the American Standards Association will exchange technical data with the other American republics in the development and use of standards, furnish information on the standardization work being done in the United States, and provide them with Spanish and Portuguese translations of standards which may be of special interest and value. In general, the idea is to provide such a thorough interchange of technical data and information that as a result, all of the countries of the Western Hemisphere will have standards as much alike as possible.

We must not allow ourselves to believe that this initial step, gratifying as it is, is a completed task. It is a move in the direction of adequacy, but only a small one, in view of the field to be covered. A definite beginning, of the right sort, we think, has been made. The undertaking, however, is extremely large, both geographically and from the standpoint of things to be done. We shall have to work extensively, but should be equipped to work intensively in certain areas at the same time. Do not forget that our alert competitors from the Eastern Hemisphere have been tilling the ground systematically for a long period of years and that representatives from the United States must quicken their efforts to overcome existent handicaps.

The American Standards Association, acting on behalf of its constituents, and with the indispensable assistance of its advisory committee on inter-American co-operation, is making a determined attempt to fortify and enlarge its initial undertaking, to the end that the opportunities now open in the field may be met and that mutual good may result therefrom. All parties who are interested in the wider spread of inter-American co-operation in the adoption of standards are assured of a hearty welcome as supporters of the movement.